(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 31 July 2003 (31.07.2003)

PCT

(10) International Publication Number WO 03/063528 A3

(51) International Patent Classification7:

H04Q 7/32

(21) International Application Number: PCT/GB03/00083

(22) International Filing Date: 13 January 2003 (13.01.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0200942.1 0223063.9 16 January 2002 (16.01.2002) GB 4 October 2002 (04.10.2002) GB

(71) Applicant (for all designated States except US): SURE ON SIGHT LTD [GB/GB]; Rod Hill House, Grindleton, Lancashire BB7 4RX (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): HAWKES, Michael [GB/GB]; Lyme House, Dunwood Lane, Staffordshire ST13 8RH (GB).

(74) Agents: MUSKER, David, C. et al.; R.G.C. Jenkins & Co., 26 Caxton Street, London SW1H 0RJ (GB).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

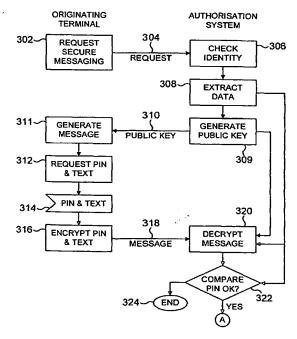
Published:

with international search report

(88) Date of publication of the international search report: 16 October 2003

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SECURE MESSAGING VIA A MOBILE COMMUNICATIONS NETWORK



(57) Abstract: A mobile terminal adapted to receive a message via a mobile communications network; request authentication data from the user of said mobile terminal; and automatically generate an acknowledgement message to the sender of said message including said authentication data.



O 03/063528 A3

A. CLASSIFICATION OF SUBJECT MATTER I PC 7 H04Q7/32

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX, IBM-TDB

| Category ° | Citation of document, with indication, where appropriate, of t | he relevant passages | Relevant to claim N | |
|--|---|--|---|--|
| | | | | |
| x | WO 92 17006 A (MOTOROLA INC) 1 October 1992 (1992-10-01) page 3, line 5 - line 20 claim 1 | 1,2 | | |
| X | WO 98 37663 A (LEONARDI ROBER BANK AB PUBL (SE)) 27 August 1998 (1998-08-27) page 3, line 30 -page 4, line page 8, line 3 - line 36 | 1,2 | | |
| х | WO 00 54457 A (SONERA SMARTTR; VATANEN HARRI (GB)) 14 September 2000 (2000-09-14 page 4, line 34 -page 6, line abstract |) | 1,2 | |
| | | | | |
| X Fur | ther documents are listed in the continuation of box C. | X Patent family members are listed | i in annex. | |
| | ther documents are listed in the continuation of box C. | | | |
| ° Special c | | "T" later document published after the into or priority date and not in conflict wit cited to understand the principle or tinvention | ternational filing date h the application but | |
| ° Special c "A" docum consi "E" earlier filing | ategories of cited documents: ent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international date | "T" later document published after the into or priority date and not in conflict wit cited to understand the principle or to invention. "X" document of particular relevance; the cannot be considered novel or cannot be seen as the considered novel or cannot be seen as the cannot be considered novel or cannot be seen as the cannot be considered novel or cannot be seen as the cannot be considered novel or cannot be seen as the cannot be considered novel or cannot be seen as the can | ternational filing date h the application but heory underlying the claimed invention of be considered to | |
| ° Special c "A" docum consi "E" earlier filing | ategories of cited documents: ent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international date | "T" later document published after the interpretation or priority date and not in conflict with cited to understand the principle or to invention. "X" document of particular relevance; the cannot be considered novel or cannot be considered novel or cannot be considered to involve an inventive step when the depend to particular relevance; and the cannot be considered to involve an inventive and involve and invo | ternational filing date h the application but heory underlying the claimed invention of be considered to locument is taken alone claimed invention nyentive step when the | |
| "A" docum consl "E" earlier filing "L" docum which citatic | ategories of cited documents : . ent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international | "T" later document published after the interpretate or priority date and not in conflict with cited to understand the principle or time invention "X" document of particular relevance; the cannot be considered novel or cannot involve an inventive step when the december of particular relevance; the cannot be considered to involve an inventional document is combined with one or ments, such combination being obvi | ternational filing date h the application but heory underlying the claimed invention of be considered to locument is taken alone claimed invention nventive step when the nore other such docu- | |
| "A" docum consi "E" earlier filing "L" docum which citatit "O" docum other | ategories of cited documents: ent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international date ent which may throw doubts on priority claim(s) or is cited to establish the publication date of another on or other special reason (as specified) ent referring to an oral disclosure, use, exhibition or | "T" later document published after the interpretate or priority date and not in conflict with cited to understand the principle or trinvention. "X" document of particular relevance; the cannot be considered novel or cannor involve an inventive step when the decay of the cannot be considered to involve an involve and involve and document is combined with one or metals." | ternational filing date h the application but heory underlying the claimed invention of be considered to locument is taken alone claimed invention nventive step when the hore other such docu- | |
| ° Special c "A" docum consi "E" earlier filing "L" docum which citatic "O" docum other "P" docum later | ent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international date ent which may throw doubts on priority claim(s) or its cited to establish the publication date of another on or other special reason (as specified) lent referring to an oral disclosure, use, exhibition or means ent published prior to the international filing date but | "T" later document published after the interpretation or priority date and not in conflict with cited to understand the principle or time invention "X" document of particular relevance; the cannot be considered novel or cannot involve an inventive step when the decomment of particular relevance; the cannot be considered to involve an inventive step when the cannot be considered to involve an index such combined with one or ments, such combination being obviin the art. | ternational filing date h the application but heory underlying the claimed invention of be considered to locument is taken alone claimed invention nventive step when the nore other such docu- ous to a person skilled | |
| ° Special c "A" docum consi "E" earlier filing "L" docum which citatic "O" docum other "P" docum later' Date of the | ent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international date ent which may throw doubts on priority claim(s) or is cited to establish the publication date of another or or other special reason (as specified) ent referring to an oral disclosure, use, exhibition or means ent published prior to the international filing date but than the priority date claimed | "T" later document published after the interpretate or priority date and not in conflict with cited to understand the principle or to invention "X" document of particular relevance; the cannot be considered novel or cannot involve an inventive step when the decention of particular relevance; the cannot be considered to involve an invention of particular relevance; the cannot be considered to involve an indocument is combined with one or ments, such combination being obvi in the art. "&" document member of the same patern | ternational filing date h the application but heory underlying the claimed invention of be considered to locument is taken alone claimed invention nventive step when the nore other such docu- ous to a person skilled | |
| ° Special c "A" docum consi "E" earlier filing "L" docum which citatic "O" docum other "P" docum later Date of the | ent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international date ent which may throw doubts on priority claim(s) or als cited to establish the publication date of another on or other special reason (as specified) ent referring to an oral disclosure, use, exhibition or means ent published prior to the international filing date but han the priority date claimed | "T" later document published after the interpretate or priority date and not in conflict with cited to understand the principle or to invention "X" document of particular relevance; the cannot be considered novel or cannot involve an inventive step when the decention of particular relevance; the cannot be considered to involve an invention of particular relevance; the cannot be considered to involve an indocument is combined with one or ments, such combination being obvi in the art. "&" document member of the same patern | ternational filing date h the application but heory underlying the claimed invention of be considered to locument is taken alone claimed invention nventive step when the hore other such docu- ous to a person skilled at family | |



PCT/G. 3/00083

| 1. | C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT | | | | | | |
|----|--|---|-----------------------|--|--|--|--|
| - | Category ° | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. | | | | |
| | 02.090.7 | | | | | | |
| 1 | Х | WO 97 45814 A (VAZVAN BEHRUZ) 4 December 1997 (1997-12-04) abstract page 6, line 14 - line 20 page 12, line 24 - line 25 | 1,2 | | | | |
| 1 | X | EP 1 107 623 A (NOKIA MOBILE PHONES LTD) 13 June 2001 (2001-06-13) abstract paragraph [0009] paragraph [0013] - paragraph [0019] | 1,2 | | | | |
| 20 | X | SALZMAN L ET AL: "PERIODIC RADIO USER CHECK IN WITH PERSONAL IDENTIFICATION CODE" MOTOROLA TECHNICAL DEVELOPMENTS, MOTOROLA INC. SCHAUMBURG, ILLINOIS, US, vol. 17, 1 December 1992 (1992-12-01), pages 43-44, XP000329481 ISSN: 0887-5286 the whole document | 1,2 | | | | |
| 1 | A | FR 2 809 922 A (FRANCE TELECOM) 7 December 2001 (2001-12-07) abstract page 1 | 2 | | | | |
| 1 | A | WO 00 42787 A (AHONEN PASI MATTI KALEVI; ERICSSON TELEFON AB L M (SE)) 20 July 2000 (2000-07-20) page 4, line 33 -page 5, line 20 | 1,2 | | | | |
| 2 | | | | | | | |

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-2

System for authenticating the user of a mobile terminal in a telecommunications system.

2. Claims: 3-10

System for authenticating the sender of a message in a telecommunications network.

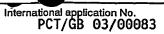
3. Claims: 11-29

Method of transmitting a message, includes requiring the user to send an acknowledgement upon receiving said message.

4. Claims: 30-32

Method of encrypting a text message in a telecommunications network.





| Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet) |
|--|
| This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons: |
| Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely: |
| Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically: |
| 3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a). |
| Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet) |
| This International Searching Authority found multiple inventions in this international application, as follows: |
| see additional sheet |
| As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims. |
| 2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee. |
| 3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.: |
| 4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-2 |
| Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees. |

INTERNATIONAL SEAF REPORT

Inte Polication No PCT/6 3/90083

| Patent document cited in search report | | Publication date | | Patent family member(s) | Publication date |
|---|---|---------------------|--|--|--|
| WO 9217006 | A | 01-10-1992 | WO | 9217006 A1 | 01-10-1992 |
| WO 9837663 | A | 27-08-1998 | SE AU BR CN EP JP NO SE WO US | 508844 C2 725952 B2 6126898 A 9807372 A 1248367 T 0962071 A1 2001513274 T 993939 A 9700587 A 9837663 A1 6556680 B1 | 09-11-1998 26-10-2000 09-09-1998 14-03-2000 22-03-2000 08-12-1999 28-08-2001 19-10-1999 20-08-1998 27-08-1998 29-04-2003 |
| WO 0054457 | A | 14-09-2000 | FI AU CA CN EP WO US | 990502 A 3168800 A 2366146 A1 1350736 T 1161813 A1 0054457 A1 2003008637 A1 | 09-09-2000 28-09-2000 14-09-2000 22-05-2002 12-12-2001 14-09-2000 09-01-2003 |
| WO 9745814 | A | 04-12-1997 | FI FI EP FI WO | 971248 A 970767 A 0960402 A1 971009 A 9745814 A1 | 26-04-1997 20-10-1997 01-12-1999 26-04-1997 04-12-1997 |
| EP 1107623 | Α | 13-06-2001 | EP | 1107623 A2 | 13-06-2001 |
| FR 2809922 | A | 07-12-2001 | FR CA EP FR WO | 2809922 A1 2407827 A1 1282985 A1 2809923 A1 0186978 A1 | 07-12-2001 15-11-2001 12-02-2003 07-12-2001 15-11-2001 |
| WO 0042787 | А | 20-07-2000 | FI AU CN EP WO JP TR | 990037 A 1986300 A 1333980 T 1142368 A1 0042787 A1 2002535897 T 200101916 T2 | 12-07-2000 01-08-2000 30-01-2002 10-10-2001 20-07-2000 22-10-2002 22-10-2001 |